



**Additional file 3: Figure S3. Histochemical localization of GUS activity in anthers of *p<sub>35S</sub>::GUS*, *p<sub>Ltp12</sub>::GUS* and *p<sub>17340</sub>::GUS* transgenic Arabidopsis plants.**

Inflorescences of *p<sub>35S</sub>::GUS* (A,B), *p<sub>Ltp12</sub>::GUS* (C,D) and *p<sub>17340</sub>::GUS* (E,F) transgenic plants were infiltrated with X-Gluc solution, stained overnight, fixed and cleared for microscopic analysis. Each panel shows a whole-mount anther at stage 12/13 (A,B,E,F) or stage 9/10 (C,D) from an independent transgenic line. GUS activity was detected in the filaments and vascular tissues of *p<sub>35S</sub>::GUS* anthers but not in pollen grains. The *p<sub>Ltp12</sub>::GUS* construct induced GUS activity specifically in the tapetum, whereas GUS activity in *p<sub>17340</sub>::GUS* transgenic anthers was almost exclusively detected in pollen grains. Scale bars are 50  $\mu$ m.